Applies To: **All Vehicles With Automatic Transmission** **January 11, 2008**

ATF Leak Detection

The ATF Leak Detection Kit, T/N UVUATFDYEKT, is a new required tool. The kit can be used to find hard-to-diagnose transmission fluid leaks on any Honda vehicle with an automatic transmission.

The ATF Leak Detection Kit contains these items:

- UV-Phazer Lite (ultraviolet spotlight)
- Four AA batteries for the UV Phazer Lite
- Micro-LED Lite (ultraviolet wide-angle light)
- Battery charger for the Micro-LED Lite
- UV glasses
- Six 1 oz. bottles of Honda ATF Fluorescent Dye
- Six service stickers for the Honda ATF Dye
- Plastic storage case

ORDERING INFORMATION

One ATF leak detection kit was shipped to each current dealer as a required special tool. Additional kits can be ordered through the Honda Tool and Equipment Program at **(888) 424-6857**. To order on the *i*N, click on **Service**, then **Service Bay**, then **Tool and Equipment Program**. From the Tool and Equipment Program menu, click on the **Online Catalog** tab, and then search for **ATF Leak Detection**.

Additional dye packs containing six bottles of Honda ATF Fluorescent Dye and six ATF dye service stickers (P/N 08200-ATFDYE, H/C 8636516) are available through normal parts ordering procedures.

USING THE ATF LEAK DETECTION KIT

NOTE:

- Within 1,000 miles of adding the Honda ATF Fluorescent Dye, remove the dye from the transmission by thoroughly draining and refilling with Honda ATF-Z1.
- Use only Honda ATF Fluorescent Dye. Other dyes contain materials that may contaminate the system and cause component failure.
- Use only one ounce of Honda ATF Fluorescent Dye per transmission. Adding more than one ounce could cause A/T component failure.
- Do not use Honda ATF Fluorescent Dye in M/Ts or CVTs.

1. Check the A/T to see if it already has dye in it:
   - Remove the A/T dipstick, and wipe it off with a clean shop towel.
   - Using the UV glasses and the UV spotlight from the kit, shine the light onto the shop towel.

   Does the ATF on the towel have a bright yellow fluorescent glow?

   Yes - Do not add more dye. Go to step 3.

   No - Go to step 2.
2. Using a clean funnel, pour one ounce (one bottle) of Honda ATF Fluorescent Dye into the A/T through the filler hole. Reinsert the dipstick.
3. Thoroughly clean the transmission case with contact cleaner, dry it with compressed air, and check for residual fluid. If needed, repeat the cleaning process until all residual fluid is completely removed.
4. Raise the vehicle on a lift until the wheels are just off the ground.
5. Start the engine, then shift through all forward gears and reverse. Cycle through the gears at least 20 times.

   NOTE: If the engine doesn't shift past 2nd gear, keep the engine speed at 2,500 rpm, and shift from Drive to Neutral and back to Drive.

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Skill Level R REPAIR

CUSTOMER INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Honda automobile dealer.

6. Stop the engine. Using the UV glasses and the UV lights from the kit, check the entire transmission for leaks. A leak will show up as a bright yellow fluorescent glow. Check these areas:
   - Pressure ports and switches
   - Solenoids
   - Seals and gaskets
   - Drain bolt
   - Entire case (for porosity)

   NOTE: Not all UV lights work well with all types of ATF dye. Use only the lights from the kit.

   Did you find the leak source(s)?

   Yes - Go to step 8.

   No - Go to step 7.
7. Test-drive the vehicle for several minutes, then recheck for leaks.

   Did you find the leak source(s)?

   Yes - Go to step 8.

   No - Fill out an ATF dye service sticker. In the sticker's Fluid Change Mileage box, add 1,000 miles to the dye installation mileage. Attach the sticker to the top left corner of the windshield, then ask the customer to return the vehicle for another leak inspection within 200 miles. When the vehicle returns, check it for ATF leaks.
   - If you find the leak source(s), go to step 8.
   - If no leaks are found, the initial ATF noticed by the customer was probably residual fluid left over during manufacturing. Go to step 9.

Leak detection dye has been added to your automatic transmission fluid and MUST be removed within 1000 miles of installation.
Dye Installation Mileage
Fluid Change Mileage
American Honda Motor Co., Inc.

ATF Dye Service Sticker

8. Attempt to repair the leak(s) using the appropriate procedure(s) from the appropriate service manual.

   Was the leak repaired?

   Yes - Go to step 9.

   No - Go to step 11.
9. Remove the ATF dye from the transmission using this procedure:

   NOTE: To avoid transmission damage, the ATF dye must be removed within 1,000 miles.

   a. Raise the vehicle on a lift.

   b. Drain the ATF (see Section 14 of the appropriate service manual).

   c. Lower the vehicle, then refill the A/T with Honda ATF-Z1 (see Section 14 of the appropriate service manual).

   d. Raise the vehicle until the wheels are just off the ground.

   e. With the engine at normal operating temperature, press the accelerator pedal to raise the engine speed to 2,500 rpm.
      - If the A/T shifts past 2nd gear, go to substep f.
      - If the A/T doesn't shift past 2nd gear, keep the engine speed at 2,500 rpm, and shift from Drive to Neutral and back to Drive. Then go to substep f.

   f. After the A/T shifts through all forward gears, press the brake pedal until the vehicle speed drops to zero. Shift into Reverse and then into Neutral.

   g. Shift into Drive, then repeat substeps e and f *four more times*.

   h. Repeat substeps a thru f *two more times*.

   i. Drain the ATF, then refill the A/T with Honda ATF-Z1 (see Section 14 of the appropriate service manual). Use new sealing washers the final time you reinstall the filler bolt and the drain bolt.
10. Remove the ATF dye service sticker (if attached), then return the vehicle to the customer.
11. Install a remanufactured A/T.

    NOTE: Before you return the original A/T, circle any leak areas you found with a permanent marker. This will help the factory during the remanufacturing process.
    - Refer to Section 14 of the appropriate service manual, or
    - Online, enter keywords **A/T INSTALL**, and select **A/T Installation** from the list.